Draft CVPIA Fiscal Year 2009 Annual Work Plan

December 1, 2008

Refuge Water Conveyance (Wheeling) Program CVPIA Section 3406(d)(1), (2) and (5)

Responsible Entities

Staff Name	Agency	Role
Sonya Nechanicky	USBR	Lead, Refuge Water Conveyance
		Program Manager
Dale Garrison	USFWS	Co-Lead, Refuge Water Supply
		Coordinator

Program Goals and Objectives for FY 2009

The Refuge Water Conveyance Program (Program) endeavors to meet the mandate of Section 3406(d)(1), (2), and (5) of the Central Valley Project Improvement Act (CVPIA), to provide long-term, firm and reliable water deliveries to 19 certain Federal, State, and private wetlands and wildlife habitat areas (hereinafter referred as refuges) located in the Central Valley of California.

This program has two primary performance goals, specifically, starting with Water Year 2002 forward:

- Annually provide/deliver Level 2 water supplies by specified amounts to the refuges totaling 422,251 acre-feet;
- Annually deliver Incremental Level 4 acquired water supplies by specified amounts to the refuges totaling 133,264 acre-feet.

Source Documents to CVPIA Refuge Conveyance Program:

- Report on Refuge Water Supply Investigations, Central Valley Hydrologic Basin, California (3/1989)
- San Joaquin Basin Action Plan/Kesterson Mitigation Plan, Merced County, California (12/1989)
- San Joaquin Basin Action Plan and North Grasslands Area Conveyance Facilities Final EA/IS (12/1997)
- Conveyance of Refuge Water Supply Project, East Sacramento Valley Study Area Final EA/IS and Proposed FONSI/Negative Declaration (12/1997)
- Conveyance of Refuge Water Supply Project, West Sacramento Valley Study Area Final EA/IS and Proposed FONSI/Negative Declaration (12/1997)
- Conveyance of Refuge Water Supply, South San Joaquin Valley Study Area (Kern and Pixley National Wildlife Refuges) Final EA/IS (10/2003)
- Conveyance of Refuge Water Supplies to the East Bear Creek Unit of the San Luis National

- Wildlife Refuge Final E.A. (2/2006)
- Refuge Water Supply Conveyance Alternatives Refinement Memorandum (East and West Sacramento Valley) (5/1995)
- Refuge Water Supply Long-Term Water Supply Agreements Sacramento River Basin Final EA/IS (1/2001)
- Refuge Water Supply Long-Term Water Supply Agreements Tulare Lake Basin Final EA (1/2001)
- Refuge Water Supply Long-Term Water Supply Agreements, San Joaquin River Basin Final EA/IS (1/2001)
- Report of Recommended Alternatives Refuge Water Supply and San Joaquin Basin Action Plan Lands (4/1995)

Status of the Program

The Refuge Water Conveyance Program is one of four components of the Refuge Water Supply Program. The remaining three components are the WAP, the Refuge Facilities Construction Program, and the San Joaquin Basin Action Plan Construction Program; the latter two construction programs are subsets to the Program, supporting the Refuge Water Conveyance Program by acquiring needed external conveyance capacity for delivery of full Level 4 water supplies to the refuges. The Program conveys set quantities of water based on refuge water supply contracts using cooperative agreements with water delivery entities using Project and acquired water. There are allocations for both Level 2 and Incremental Level 4 water to be supplied to each refuge that serve as the Program's goals for water conveyance quantities. Each year in February and March, Reclamation, CVO and WAP announce the available refuge water quantities for the contract year or water year that begins in March. At this time, annual water delivery schedules are developed by each refuge and coordinated through the IRWMT. The IRWMT is chaired by Reclamation, and includes refuge managing agencies FWS (also Program co-lead), GWD and the CDFG, and representation from CVJV. The water delivery schedules are closely coordinated with the Program to assure that conveyance facilities and funding resources are adequate for the scheduled water quantities.

To meet the mandate of the CVPIA to provide annual refuge water supplies, Reclamation entered into long-term water supply contracts with GWD, FWS, and CDFG which established Reclamation's commitment under CVPIA and identified the requirements of each party to the contract. There are five refuge water supply contracts: two with CDFG for water to Gray Lodge, Los Banos, Volta, Mendota and North Grasslands Wildlife Areas; two with the FWS for water to Sacramento, Delevan, Colusa, Sutter, San Luis, Merced, Kern and Pixley Wildlife Refuges; and one with GWD for water to GRCD (GRCD is a privately-owned and managed wetlands).

Furthermore, in meeting the CVPIA requirement to convey refuge water, Reclamation currently has eight long-term (7-50 years) conveyance agreements that are administered by the Program, along with one FWS 40-year conveyance agreement, also administered under the Program. These long-term agreements are with SLCC (two agreements), CCID, GWD, SLDMWA, BVWSD, DWR, BWGWD, and GCID. The costs shown in this work plan for conveyance cooperative agreements in the Program Tasks, Description and Budget section represent the calculated costs of conveying the quantities of water anticipated to be scheduled for delivery in WY09 under these conveyance agreements. The Program utilizes cooperative agreements to

reimburse delivering entities for costs of conveying Level 2 and Incremental Level 4 water supplies through Federal, State, and private water distribution systems to the refuges. SCCAO and NCAO manage a significant portion of the conveyance agreement administration for all but one agreement. The FWS California-Nevada Office (CNO) administers one of the two SLCC conveyance agreements.

Numerous biological benefits have resulted from a reliable year-round water supply through CVPIA that adequately meets the delivery schedule for wetland management on CVPIA wildlife refuges. Habitat is now available during the months of August and early September which benefits early migrant waterfowl and shorebirds, and also provides habitat for resident wildlife and their young during a critical time of the year when wetland habitat can be particularly limited due by hydrology.

Applying water for semi-permanent and permanent wetland habitat in the spring and summer directly benefits the recovery of special status species such as the giant garter snake, white-faced ibis, and tricolored blackbirds. Wintering wildlife also benefit because this habitat type provides diversity in a landscape dominated by shallow wetland habitat.

Seasonal wetlands are now maintained and de-watered to coincide with peak migration times of shorebirds and waterfowl. Timely de-watering also promotes the germination and irrigation of important moist-soil food plants, such as swamp timothy grass and watergrass. These plants provide a high-energy food source through both their seeds and associated invertebrate communities. The increase in supply reliability allows wetland managers to lower water depths to make seeds and invertebrates available without the fear of having wetlands completely evaporate.

Another significant advantage is that the ability to battle avian disease outbreaks, such as botulism and cholera, is greatly assisted by applying additional water and creating a "flow through" system of water delivery and drainage. This "flow through" also helps deal with wetland areas high in salinity, which are often lower in productivity and diversity. CVPIA water allows wetland managers to "flush" salts from wetland basins and improve soil quality.

FY 2008 Accomplishments

1. The Program strived to meet the mandates of CVPIA, specifically the two primary performance goals of providing and delivering full Level 2 and Incremental Level 4 amounts to the refuges.

In Water Year 2007 (March 1, 2007, thru February 29, 2008), approximately 388,521 acrefeet of Level 2 water and approximately 45,049 acre-feet of Incremental Level 4 water were delivered to the refuges through the refuge water supply contracts according to the delivery schedules provided by GWD, FWS, and CDFG. The Level 2 amount of 388,521 includes an estimated 57,727 acre-feet of water provided from diverse sources other than Project yield, including State water rights water, groundwater, water from gravity flow, and water through an existing mitigation agreement under Federal Energy Regulatory Commission license with Merced Irrigation District. The Incremental Level 4 amount of 45,049 includes 1,500 acrefeet of the same mitigation water from Merced Irrigation District.

Primarily due to existing limitations of external conveyance capacity, and to a much less

- extent due to the fact that a few refuges requested less than full Level 2, the Program did not deliver full Level 2. The Program delivered the full amount of Incremental Level 4 water acquired through the WAP. However, the WAP was restricted in its water acquisitions by both limited available water on the open market by willing sellers and insufficient funding.
- 2. Coordinated with the IRWMT to develop Level 2 and Incremental Level 4 water delivery schedule scenarios based on changing water availability, receive timely refuge monthly water delivery schedules, and prioritize limited Incremental Level 4 water supplies.
- 3. Finalized negotiations between BWGWD, CDFG, and Reclamation resulting in a water accounting methodology which provides for equitable accounting of CDFG water rights water, CVP (Project) water, and Reclamation acquired non-Project water delivered to the Gray Lodge WA through the BWGWD facilities. The resulting agreement between these three parties was incorporated into the long-term water conveyance agreement between Reclamation and BWGWD.
- 4. Negotiated language modification to the long-term water conveyance agreement between Reclamation and BWGWD, resolving a specific agreement issue and allowing Reclamation to move forward on the construction project for facilities improvements to BWGWD for the benefit of surface water deliveries to Gray Lodge WA.
- 5. Negotiated the fourth and final amendment extending the term date to February 28, 2009, on the groundwater pumping reimbursement agreement with California State Department of Fish and Game for the purpose of supplementing Level 2 surface water supplies up to full Level 2 allocation for the Gray Lodge WA.
- 6. Coordinated with CVO, WAP, and Federal, State and private refuges on water needs and delivery schedules to ensure that contract obligations were met. CVO is responsible for providing Level 2 water supplies from Project water, and the WAP is responsible for acquiring Incremental Level 4 supplies. (The majority, but not all, of Level 2 water supplies comes from Project water.)
- 7. Continued funding support for the Grassland Wetlands Modified Hydrology Study which consisted of funding annual cellular telemetry data collection, storage, and access costs. The study involves water quality monitoring and wildlife studies of modified water management of GRCD and CDFG wetlands sites in the Grassland ecological area to determine if water management changes could minimize water quality impacts to the San Joaquin River and still meet wildlife habitat management goals. These efforts have potential application for development of water quality BMPs for various wildlife refuges in the San Joaquin River Basin.
- 8. Continued cost share development process to determine current cost share apportionment for the State of California related to Incremental Level 4 water supplies, including water acquisition, certain conveyance facilities construction, and water delivery costs. This process is covering the last seven Federal fiscal years, and efforts are coordinated with FWS, CDFG, and DWR. A final task order resulting from this process is anticipated to be completed by December 2008.
- 9. Developed a draft long-term 10-year implementation plan (2009-2018) for the Refuge Water Supply Program through a coordinated process with CDFG, FWS, GWD, and CVJV. This draft plan incorporates a prioritization of all identified activities covering refuge water conveyance, water acquisition, and conveyance facilities improvements construction projects. This plan will be provided to the U.S. Office of Management and Budget (OMB) supplementing earlier reports provided to OMB under their Program Assessment Rating Tool (PART) process.

10. Managed a conservation easement of 113 acres of giant garter snake habitat from May 1 through September 30, 2008, on a privately-owned site in Glenn County. This habitat was restored and is maintained annually to satisfy the mitigation requirements made necessary by refuge conveyance construction activities in the Sacramento Valley.

FY 2009 Anticipated Program Activities

1.1 Program Management

1.1.1 – RECLAMATION – Program Manager. Provide oversight, administration, and planning for all aspects of the Refuge Water Conveyance Program (Program). Identify and initiate projects needed to achieve Program goals and meet long-term and short-term refuge water supply needs, exploring options and incorporating prioritization processes. Develop strategies to achieve set goals. Collaborate with Program agency partners. Maintain and continue to build on good cooperative working relationships and cohesive partnerships with refuge managers, conveyance contractors, other agencies, and stakeholders. As primary contact and coordinator for the Program, represent the Program at internal and external meetings, and provide presentations. Maintain strong coordination with Area Offices (A.O.) staff, Regional Office (R.O.) technical staff, delivering entities, local and regional refuge managers, and agency refuge coordinators. Provide oversight and guidance to the technical support personnel on related Program projects and tasks. Maintain strong Program accountability, assuring compliance with Federal and State laws, including National Environmental Policy Act (NEPA) compliance, monitoring program progress, maintaining adequate records, utilizing audit tools, and providing information to interested parties. Provide oversight and review of annual Program budget, obligations and expenditures, and contract activities and payments. Develop annual work plans and activity plans. Expand Program information resources.

Interagency Coordination: Organize and chair the Interagency Refuge Water Management Team (IRWMT) meetings, with Reclamation as the Program Lead. IRWMT membership includes all three refuge managing agencies being the U.S. Fish and Wildlife Service (FWS), Grassland Water District (GWD) and the California Department of Fish and Game (CDFG), and representation from the Central Valley Joint Venture (CVJV) partnership. The IRWMT coordinates the annual refuge water delivery schedules, manages allocation of available Incremental Level 4 water, and facilitates ongoing water management issues.

Provide oversight and review for existing long-term and interim conveyance agreements and long-term water supply contracts. Contract administration includes coordinating with Central Valley Operations (CVO) office, Water Acquisition Program (WAP) and the refuge managers on water needs and delivery schedules to ensure the contract obligations are met. Administer R.O. Program-related agreements. Negotiate new long-term and interim conveyance agreements. Coordinate and assist on conveyance facilities improvement (construction) agreements with the contracting officer's representatives, cooperating entities, and managing agencies of those affected refuges.

Negotiate a new long-term reimbursement agreement between Reclamation and CDFG for groundwater pumping at the Gray Lodge Wildlife Area (Gray Lodge WA). The purpose of this agreement is to use groundwater to supplement surface water deliveries, conveyed by

Biggs-West Gridley Water District (BWGWD), up to full Level 4 amounts at Gray Lodge WA during both the facilities construction phase at BWGWD and during the annual 3-month BWGWD system dewatered period.

Reductions in deliveries of Level 2 and Incremental Level 4 water supplies may result in detrimental impacts on wildlife habitats. Unintended consequences would include limitations of Refuge managers in the implementation of their WY09 management plans; likely reductions of seasonal wetlands acreage; and decreased water supplies for irrigation of food plants resulting in reduced food sources for wildlife.

1.2 Program Support

1.2.1 – **RECLAMATION** – **Program Support Specialist.** Develop initial annual Program budget and track through final execution. Initiate and monitor fund obligations and expenditures. Assist with development of annual work plans and activity plans. Provide technical support for R.O. Program-related agreements and associated financial processes, including invoice reconciliation and payments. Maintain adequate Program records, and assist in providing Program information for internal and external requests. Participate in IRWMT and other Program related meetings, and provide support for various Program projects and functions. Maintain existing Refuge Water Supply Program website.

1.2.2 – **FWS** – **Refuge Water Supply Coordinator.** As CVPIA Refuge Water Supply Program partner, provide Federal refuge coordination. Develop annual FWS Refuge Conveyance Program budget needs and submit to Reclamation for incorporation into the overall Program budget. Initiate FWS portion of budget and track through final execution. Monitor fund obligations and expenditures, and contract payments.

Participate in IRWMT meetings as Program partner with Reclamation and with cooperating entities, GWD and CDFG. Working with the IRWMT, develop the annual refuge water delivery schedules and coordinate with IRWMT partners in ongoing water management issues.

Manage the conveyance cooperative agreement with the San Luis Canal Company (SLCC), aka Henry Miller Reclamation District, (one of two conveyance agreements with SLCC under this Program; the second is administered by Reclamation). Monitor conveyance cooperative agreement obligations in coordination with FWS R.O. contracting staff, delivering entity, refuge managers and IRWMT. Provide oversight and review of related invoice reconciliation processes covering calculation of refuge water deliveries and losses, and invoices payments and tracking.

1.3 Technical Support (Reclamation)

- **1.3.1** Develop a prototype habitat health index, expressed in an algorithm of biotic and abiotic factors, to assess wetland salinity drainage management practices on migratory birds and their habitat in seasonal wetlands. This algorithm will be derived from data collected from the Grassland Wetlands Modified Hydrology Study (refer to 1.5.1).
- **1.3.2** Perform final beta testing on the CVPIA Refuge Water Supply Program Database (Phase I). Develop design for database enhancements required for Phase II, including conveyance agreement invoices and refuge water deliveries reconciliation processes. This

is an integrated database to provide for refuge water supply accounting, delivery scheduling, tracking and invoice reconciliation.

- **1.3.3** Perform water quality monitoring at Gray Lodge WA pursuant to the terms of the Reimbursement Agreement. Project tasks include surface and groundwater sampling, data collection from installed water loggers, and development of annual report summarizing data analysis. Data collected will establish a baseline for both specific organic and nonorganic sampling constituents. Data will be utilized for development of additional environmental documentation required for continuation of the Reimbursement Agreement. This data will also contribute toward some of the data required of CDFG as a member of the coalition covered by the agricultural waiver issued under the State Water Resources Control Board related to agricultural water discharge.
- **1.3.4** Information Technology (IT) staff support and maintenance for the CVPIA Refuge Water Supply Program Database.
- **1.3.5** Acquisition/Contracting Division staff support of conveyance agreements and Program-related acquisitions, including invoice tracking, payment processing, agreement modifications, and obligation of agreement funds.
- **1.3.6** South Central California Area Office (SCCAO) (both Fresno and Tracy offices) administration of conveyance cooperative agreements for California Department of Water Resources (DWR), Buena Vista Water Service District (BVWSD), SLCC, GWD, Central California Irrigation District (CCID), and San Luis Delta-Mendota Water Authority (SLDMWA). Initiate and monitor conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff and Reclamation R.O. Contracting Division. Coordinate with delivering entities, refuge managers, and SLDMWA on refuge water deliveries and resolution of water delivery reporting discrepancies. Reconcile and process invoices and track invoice payments.
- **1.3.7** Enter CVPIA refuges water delivery data into BOR WORKS database, coordinating with CVO, R.O., and A.O. staffs.
- **1.3.8** Northern California Area Office (NCAO) administration of conveyance cooperative agreements for Glen-Colusa Irrigation District (GCID) and BWGWD. Initiate and monitor conveyance cooperative agreement obligations in coordination with Reclamation R.O. Refuge Water Supply Program staff and Reclamation R.O. Contracting Division. Coordinate with delivering entities and refuge managers on refuge water deliveries and resolution of water delivery reporting discrepancies. Reconcile and process invoices and track invoice payments.
- **1.3.9** Obtain monthly water delivery data from flow meters located at all points of delivery on the Gray Lodge WA per conveyance cooperative agreement between Reclamation and BWGWD. Provide data to NCAO staff for coordination with BWGWD and Gray Lodge WA managers. Periodically perform calibrations to assure quality data from flow meters. Maintain and repair flow meters and groundwater well pump meters at Gray Lodge WA.
- 1.3.10 Continue administration of conservation easement for giant garter snake habitat

site in Glenn County. (Refer to 1.14.5.)

1.5 Evaluations, Studies, Investigations, Research

1.5.1 – Continue supporting the Grassland Wetlands Modified Hydrology Study in the Grasslands ecological area. Provide funding for annual cellular telemetry data collection, storage, and access fees. This project involves wildlife studies of modified water management of Grassland Resource Conservation District (GRCD) and CDFG wetlands to minimize water quality impacts to the San Joaquin River. These efforts have potential application for development of water quality Best Management Practices (BMPs) for various wildlife refuges in the San Joaquin River Basin.

1.7 Outreach and Public Involvement

1.7.1 – The Program coordinates and chairs the IRWMT meetings (see 1.1 above). Program participates on the CVJV Water and Power Committee to include discussions on a purview of refuge water supply topics including activities updates, water acquisition issues and opportunities, constraints, and concerns. Program meets annually, at minimum, with CVPIA stakeholders at public meeting forums to review and discuss annual work plans and provide additional Program information as requested. Program leads the cost share development process for the Refuge Water Supply Program with representatives from CDFG, FWS, and DWR. This process is covered by the multi-agency Sharing of Costs for Mitigation Projects and Improvements Agreement, referred to as SCAMPI. Program coordinates and facilitates cost share development for all four components of the Refuge Water Supply Program (RWCP, WAP, Refuge Facilities Construction Program, and San Joaquin Basin Action Plan Construction Program).

1.12 Monitoring

1.12.1 – Costs for water sampling analysis performed by contract laboratories. Water sampling analysis is part of the water quality monitoring and groundwater data collection at Gray Lodge WA pursuant to the Reimbursement Agreement (see 1.3.3 under Technical Support).

1.14 Other – Describe

- **1.14.1** Reclamation Conveyance Agreements (8 agreements) Agreement costs for conveyance of refuge water supplies.
- **1.14.2** FWS Conveyance Agreement (1 agreement) Agreement costs for conveyance of refuge water supplies.
- **1.14.3** CVPIA Refuge Water Supply Program Database Phase II. Contract for Oracle Database developer to write computer program based on Reclamation Phase II enhancements design (refer to 1.3.2). This is an integrated database designed for refuge water supply accounting, delivery scheduling, tracking and invoicing.
- **1.14.4** Fund construction of three new groundwater wells on the Gray Lodge WA, to be strategically located within the revised design of the improved internal distribution system for maximum water delivery optimization. This project relates to the Reimbursement Agreement (see 1.1.1). Reclamation has relied on the use of CDFG groundwater pumps at Gray Lodge WA to meet part of its obligation under CVPIA to deliver Level 2 water

supplies to Gray Lodge WA. CDFG is willing to continue groundwater pumping in cooperation with Reclamation. However, the majority of existing wells on the Gray Lodge WA were installed decades ago primarily for agricultural purposes, with many from 40-50 years old. These wells are largely open bore construction subject to fill by siltation and/or gravel, and in some cases, to bore collapse. Production rates and efficiency of these wells continue to decrease, while repair costs increase. Under the Reimbursement Agreement, Reclamation reimburses for pump and well repairs and well replacement should one collapse. Costs are increasing as these historical wells continue to be used beyond their intended purpose. CDFG has invested \$6.8M for internal conveyance distribution system improvements and upgrades as of August 2007, resulting in a much more efficient distribution system. Several older inefficient groundwater wells will be removed from service once the new replacement wells come on line

- **1.14.5** Fund construction of two groundwater wells on the Pixley National Wildlife Refuge (Pixley NWR), one for backup and a second to supplement to full L-2 water. Currently, there is only one groundwater well on the Pixley NWR, and it is the sole source of all water supplies until a construction project is implemented to develop external water conveyance facilities for delivery to the refuge boundary. Groundwater provides only a portion of Level 2 water supplies, with average annual groundwater supplies providing less than 15% of total Level 4 water allocation to the Pixley NWR. During Water Year 2007, mechanical problems with this single well pump resulted in no water availability for five months during the fall and winter, which are prime seasons for sandhill crane use.
- **1.14.6** Provide water supplies for giant garter snake habitat on privately-owned site. Habitat was restored and is maintained annually to satisfy the mitigation requirements made necessary by refuge conveyance construction activities in the Sacramento Valley. Water is provided through groundwater pumping at the site, and this project provides funding for Pacific Gas & Electric (PG&E) power costs to run one well pump. (Refer to 1.3.12.)
- **1.14.7** Annual PG&E power costs for lift-pumping water from Colusa National Wildlife Refuge (Colusa NWR) boundary, conveyed by GCID, to internal units at higher elevations.
- **1.14.8** Delivery of water to Merced National Wildlife Refuge (Merced NWR) through onsite groundwater pumping during the three-month maintenance outage period of Merced Irrigation District (MID). This project is for PG&E power costs for the well pumps.

Task or Subtask Number	Name of Activity	FTEs	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR
1.1	Program Manageme	nt					
1.1.1		1.00	Reclamation Refuge Water Conveyance Program Manager Manage, provide oversight, and administer Refuge Water Conveyance Program. (High priority)	9/30/2009	\$171,714	\$171,714	\$0
	Subtotal Costs		Reclamation		\$171,714	\$171,714	\$0
1.2	Program Support						
1.2.1	Trogram oupport	1.00	Reclamation Refuge Water Supply Program Support Specialist Develop Program budget and provide support services for Refuge Water Supply Program. (High priority)	9/30/2009	\$145,395	\$145,395	\$0
1.2.2		0.50	FWS Refuge Water Supply Coordinator (Co-lead) Provide Federal refuge coordination. (High priority)	9/30/2009	\$100,121	\$100,121	\$0
	Subtotal Costs		Reclamation		\$145,395	\$145,395	\$0
	Subtotal Costs		<u>FWS</u>		\$100,121	\$100,121	\$0
1.3	Technical Support						
1.3.1		0.23	Reclamation Continue water quality monitoring at Gray Lodge WA. (High priority)	9/30/2009	\$40,000	\$40,000	\$0
1.3.2		0.05	Reclamation Provide IT support to Refuge Water Supply Program Database. (High priority)	9/30/2009	\$5,000	\$5,000	\$0
1.3.3		0.13	Reclamation Process conveyance agreement payments and modifications. (High priority)	9/30/2009	\$16,000	\$16,000	\$0
1.3.4		0.20 0.15	Reclamation SCCAO - Administer refuge conveyance agreements. (High priority)	9/30/2009	\$69,311	\$69,311	\$0
1.3.5		0.08	Reclamation –SCCAO - Enter Refuge Water Supply Program data into BORWORKS program. (High priority)	9/30/2009	\$9,780	\$9,780	\$0
1.3.6		0.30	Reclamation NCAO - Administer refuge conveyance agreements. (High priority)	9/30/2009	\$45,264	\$45,264	\$0
1.3.7		0.58	Reclamation Download data from POD meters at Gray Lodge WA; maintain meters. (High priority)	9/30/2009	\$69,227	\$69,227	\$0
1.3.8		0.03	FWS Administer Giant Garter Snake mitigation in Sacramento Valley. (High priority)	9/30/2009	\$12,015	\$12,015	\$0
1.3.9		0.10	Reclamation – <u>UNFUNDED NEED</u> - Analyze data collected from the Grassland Wetlands Modified Hydrology Study in the Grassland ecological area.	9/30/2009	\$17,000	\$0	\$0
1.3.10		0.12	Reclamation – <u>UNFUNDED NEED</u> - Continue design of enhancements for Refuge Water Supply Program Database project.	9/30/2009	\$21,500	\$0	\$0
	Subtotal Costs		FWS		\$12,015	\$12,015	\$0
	Subtotal Costs		Reclamation		\$293,082	\$254,582	\$0
1.5	Evaluations, Studies	, Investig	gations, Research				
1.5.1			Reclamation – <u>UNFUNDED NEED</u> - Continue funding support for the Grassland Wetlands Modified Hydrology Study in the Grassland ecological area.	9/30/2009	\$25,000	\$0	\$0
	Subtotal Costs		Reclamation		\$25,000	\$0	\$0
4.7	Outroach and Bud !!						
1.7	Outreach and Public	involven	Reclamation IRWMT, CVPIA stakeholders public meetings, SCAMPI cost share.				
1.7.1			Funding included under Program Management and Program Support. (High priority)	9/30/2009	\$0	\$0	\$0
	Subtotal Costs		Reclamation		\$0	\$0	\$0

Task or Subtask Number	Name of Activity	FTEs	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR	
1.12	Monitoring							
1.12.1			Reclamation Laboratory water sampling analysis costs related to GLWA Deep Well Reimbursement Agreement. (High priority)	9/30/2009	\$25,000	\$25,000	\$0	
	Subtotal Costs		Reclamation		\$25,000	\$25,000	\$0	
1.14	Other - Describe							
1.14	Other - Describe		Reclamation conveyance agreements (8) costs. (High priority) UNFUNDED					
1.14.1	Conveyance Agrmts NEED of \$875,765. A 15% deliveries of Level 2 water reduced deliveries of the concremental Level 4 water		NEED of \$875,765. A 15% reduction of initial FY2009 budget will result in reduced deliveries of Level 2 water to those refuges having full delivery capacity, and reduced deliveries of the current anticipated acquisition of 42,715 ac-ft of Incremental Level 4 water to approximately 15,000 ac-ft (7,500 ac-ft specifically for Kern NWR).	9/30/2009	\$7,628,053	\$6,752,288	\$0	
1.14.2	Conveyance Agrmts		FWS conveyance agreement (1) costs. (High priority) <u>UNFUNDED NEED</u> – 15% reduction of initial FY2009 budget results in reduced deliveries of Level 2 water to those refuges having full delivery capacity.	9/30/2009	\$679,503	\$0	\$0	
1.14.3	Refuge Database - Phase II		Reclamation <u>UNFUNDED NEED</u> - Phase II of Refuge Water Database development.	9/30/2009	\$45,000	\$0	\$0	
1.14.4	Partnership thru Cooperative Agrmt		Reclamation <u>UNFUNDED NEED</u> - Fund construction of 3 groundwater wells at Gray Lodge WA. (Medium to High priority)	9/30/2009	\$1,500,000	\$0	\$0	
1.14.5	Partnership thru Cooperative Agrmt		Reclamation <u>UNFUNDED NEED</u> - Fund construction of 2 groundwater wells at Pixley NWR. (Medium to High priority)	9/30/2009	\$1,500,000	\$0	\$0	
1.14.6	Mitigation Ground- water Pumping		FWS Costs for groundwater pumping on giant garter snake habitat. (High priority)	9/30/2009	\$12,385	\$12,385	\$0	
1.14.7	Lift Pumping		FWS Costs for lift pumping at Colusa NWR. (High priority)	9/30/2009	\$91,500	\$91,500	\$0	
1.14.8	Groundwater Pumping		FWS – <u>UNFUNDED NEED</u> – 15% reduction of initial FY2009 budget results in no groundwater pumping at Merced NWR, eliminating L-2 water deliveries for 3 months during MID outage period. (High priority)	9/30/2009	\$172,020	\$0	\$0	
	Subtotal Costs		Reclamation		\$10,673,053	\$6,752,288	\$0	
	Subtotal Costs		<u>FWS</u>		\$955,408	\$103,885	\$0	
	FWC total aget				\$4.067.E44	£246.024	Ф О	
	FWS total cost Reclamation total cost				\$1,067,544 \$11,333,244	\$216,021 \$7,348,979	\$0 \$ 0	
	Total Costs				\$11,333,244	\$7,565,000	\$0 \$0	
	Total FTEs	4.50			φ12,400,700	Ψ1,303,000	φυ	
	Potential 15% funding cut		\$17,000 from task 1.3.9; \$21,5000 from task 1.3.10; \$25,000 from task 1.5.1; \$494,986 from task 1.14.1; \$604,494 from task 1.14.2; \$172,020 from task 1.14.8		\$1,335,000	\$1,335,000	\$0	
	Proposed President's Budget for FY09 identified \$8.9M for Refuge Conveyance Program. This work plan is developed for a 15% reduction, or \$7,565,000. Based on a 15% reduction of the initial FY09 budget, the Refuge Conveyance Program has an immediate need of \$1,727,288 additional funds in order to meet its primary objective to deliver approximately 346,000 acre feet of L-2 water and an anticipated acquisition of 42,715 acre feet of Incremental L-4 water. (346,000 acref to f L-2 does not include all L-2 water delivered to refuges from sources other than Project yield.) A total overall program need of \$4,835,788 additional funds is required to meet all identified objectives for this year. (\$4,835,788 includes the \$1,727,288 required for delivery of L-2 and Incremental L-4 water).							

Table 2. BUDGET BREAKOUT

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	Agency	FTE	LABOR		CONTRACTS				
Task			Direct Salary and Benefits Costs	Overhead Costs on Salary & Benefits	FWS Overhead Assess: 22% of Direct Salary and Benefits Costs	Contract, Grant, and Agreement Costs	FWS Overhea d Assess: 6% Contract Costs/ 22% Utility Costs	Misc. Costs	Total Costs
1.1 Program	USFWS		0	0	0	0	0		0
Managemen t	USBR	1.00	93,658	72,845		0		5,211	171,714
1.2 Program	USFWS	0.50	33,647	48,419	18,055	0	0		100,121
Support	USBR	1.00	78,903	62,053		0		4,439	145,395
1.3 Technical	USFWS	0.06	4,038	5,810	2,167	0	0		12,015
Support	USBR	1.72	146,507	95,696		0		12,379	254,582
1.5	USFWS		0	0	0	0	0		0
Evaluations, Studies, Investi- gations, Research	USBR		0	0		0		0	0
1.7	USFWS		0	0	0	0	0		0
Outreach and Public Involvement	USBR		0	0		0		0	0
1.12	USFWS		0	0	0	0	0		0
Monitoring	USBR		. 0	0		25,000		0	25,000
1.14 Other	USFWS -Agrmt		0	0	0	0	0		0
	USFWS -Utility		. 0	0	0	85,152	18,733		103,885
	USBR		. 0	0		6,752,288		0	6,752,288
FWS Total Co	sts	0.56	37,685	54,229	20,221	85,152	18,733		216,021
BOR Total Co	sts	3.72	319,068	230,594		6,777,288		22,029	7,348,979
TOTAL ALL		4.28	356,753	284,823	20,221	6,862,440	18,733	22,029	7,565,000

Table 3. Three-Year Budget Plan FY 2010-2012 (\$ thousands)

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2010	Convey 100% of Level 2 water to those refuges having full delivery capacity, and convey full amount of projected acquired Incremental Level 4 water (surface/ground water and lift pumping); continue water quality monitoring at GLWA; continue funding support for Grassland Wetlands Modified Hydrology Study; RWSP data base development and enhancements; construction of 5 groundwater wells at Gray Lodge WA and Pixley NWR; IT mgmt of Gray Lodge WA water delivery data website.	\$12,725	\$0
2011	Convey 100% of Level 2 water to those refuges having full delivery capacity, and convey full amount of projected acquired Incremental Level 4 water (surface/ground water and lift pumping); continue water quality monitoring at GLWA; continue funding support for Grassland Wetlands Modified Hydrology Study; RWSP data base development and enhancements; construction of 5 groundwater wells at Gray Lodge WA and Pixley NWR; IT mgmt of Gray Lodge WA water delivery data website. (Well projects carried forward should funding not be available in previous fiscal year.)	\$13,968	\$0
2012	Convey 100% of Level 2 water to those refuges having full delivery capacity, and convey full amount of projected acquired Incremental Level 4 water (surface/ground water and lift pumping); continue water quality monitoring at GLWA; continue funding support for Grassland Wetlands Modified Hydrology Study; RWSP data base development and enhancements; construction of 5 groundwater wells at Gray Lodge WA and Pixley NWR; IT mgmt of Gray Lodge WA water delivery data website. (Well projects carried forward should funding not be available in previous fiscal year.)	\$14,599	\$0

Note: The FY 2010 - 2012 Budget Plan provides estimates of capability only. The amounts are displayed are those that might be reasonably appropriated each year. These figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.